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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/855,683	05/16/2001	Tuan Huu Pham	06975-136001	1532
26171	7590	01/16/2004	EXAMINER	
FISH & RICHARDSON P.C. 1425 K STREET, N.W. 11TH FLOOR WASHINGTON, DC 20005-3500			HO, THE T	
			ART UNIT	PAPER NUMBER
			2126	

DATE MAILED: 01/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/855,683

Applicant(s)

PHAM ET AL.

Examiner

The Thanh Ho

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 May 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-87 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-87 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2, 4 and 5. 6) ☐ Other:

DETAILED ACTION

1. This action is in response to the application filed 5/16/2001.
2. Claims 1-87 have been examined and are pending in the application.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-16, 19-44, 47-72 and 75-87 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krishnan U.S Patent No. 6,075,863 in view of Onosaka U.S Patent No. 5,961,608.

As to claim 1, Krishnan teaches a system for installing computer software components (applets, line 24 column 3) on a client device (device capable of performing user input and output functions, lines 40-43 column 2) for enabling connectivity (to connect a user computer to a remote computer, lines 34-35 column 1) to a host system (remote computer, line 35 column 1) by at least one hardware device (modem 24, Fig. 1), comprising a receiving module (data port 16, line 44 column 2) that is structured and arranged to receive (exchange data between modem 10 and host computer 12, lines 44-45 column 2) a connectivity component (applets, line 24 column 3) that enables connectivity (to connect a user computer to a remote computer, lines 34-35 column 1) to a host system (remote computer, line 35 column 1) by at least one hardware device

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(modem 24, Fig. 1); a detection module that is structured and arranged to detect whether installation (determines if the applet on the remote modem has the newer version, lines 29-36 column 4) of the connectivity component (applets, line 24 column 3) is needed to enable connectivity (to connect a user computer to a remote computer, lines 34-35 column 1) between the client device (device capable of performing user input and output functions, lines 40-43 column 2) and the host system (remote computer, line 35 column 1) using a selected hardware device (modem 24, Fig. 1); an installation module that is structured and arranged to install (download the newer applet from the remote modem, lines 35-36 column 4) the connectivity component (applets, line 24 column 3) when the connectivity component is needed (if the remote modem has the newer version, lines 33-34 column 4) to enable connectivity (to connect a user computer to a remote computer, lines 34-35 column 1) between the client device (device capable of performing user input and output functions, lines 40-43 column 2) and the host system (remote computer, line 35 column 1) using the selected hardware device (modem 24, Fig. 1). Krishnan does not explicitly teach several different hardware devices.

Onosaka teaches a system for loading computer software components (modem driver for a selected modem, lines 29-33 column 4) on a client device (user device, lines 34-37 column 4) for enabling connectivity to a host system (access remote communication server, lines 49-55 column 4) by at least one (the current modem, lines 32-33 column 4) of several different hardware devices (removable card, internal modem, external modem, lines 31-32 column 4). It would have been obvious to apply

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the teachings of Onosaka to the system of Krishnan because this gives the client computer the convenience of using a suitable modem from multiple modems to connect to a remote computer as disclosed by Onosaka (lines 29-37 column 4).

As to claim 2, Krishnan as modified further teaches the receiving module is structured and arranged to receive the connectivity component from a local source (the applet code is stored in RAM 20, lines 30-31 column 3).

As to claim 3, Krishnan as modified further teaches the receiving module is structured and arranged to receive multiple connectivity components from the local source (RAM 20 provides storage for applets, line 66 column 2; the applet code is stored in RAM 20, lines 30-31 column 3).

As to claim 4, note the discussion of claim 1 above.

As to claim 5, Krishnan as modified further teaches the receiving module is structured and arranged to receive the connectivity component from a remote source (applets downloaded into modem 10 from host computer 12, lines 25-26 column 3).

As to claim 6, Krishnan as modified further teaches the receiving module is structured and arranged to receive multiple connectivity components from the remote source (applets downloaded into modem 10 from host computer 12, lines 25-26 column 3).

As to claim 7, note the discussion of claim 1 above.

As to claim 8, Krishnan as modified further teaches the connectivity component (applets, line 24 column 3) is capable of interfacing a device driver (the applets upgrade the modem control software, lines 34-41 column 5) to enable communications (to

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connect a user computer to a remote computer, lines 34-35 column 1) between computer software (data, line 44 column 2) at the client device (device capable of performing user input and output functions, lines 40-43 column 2) and the host system (host computer 12, line 45 column 2) using a hardware device (modem 24, Fig. 1) associated with the device driver (the modem control software, line 35 column 5).

As to claim 9, Krishnan as modified further teaches the connectivity component (applets, line 24 column 3) is capable of interfacing directly (directly executed by the processor of the communication device, lines 7-8 of abstract) with the selected hardware device (modem 24, Fig. 1) to enable connectivity (to connect a user computer to a remote computer, lines 34-35 column 1) between the client device (device capable of performing user input and output functions, lines 40-43 column 2) and the host system (host computer 12, line 45 column 2) using the selected hardware device (modem 24, Fig. 1).

As to claim 10, Krishnan as modified further teaches the connectivity component (applets, line 24 column 3) includes computer software that interfaces with a driver (the applets upgrade the modem control software, lines 34-41 column 5) for a hardware device (modem 24, Fig. 1) that is used to connect (to connect a user computer to a remote computer, lines 34-35 column 1) to the host system (host computer 12, line 45 column 2).

As to claim 11, Krishnan as modified does not explicitly teach the use of broadband connectivity component with a broadband communication device. Onosaka teaches the use of external modem and its driver (lines 29-37 column 4). It would have

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been obvious to apply the teachings of Onosaka to the system of Krishnan because this external modem and its driver could be a broadband communication device with a broadband connectivity component since such teaching is conventional and well known in the art.

As to claim 12, Krishnan as modified does not explicitly teach the use of DSL connectivity component with a DSL modem. Onosaka teaches the use of external modem and its driver (lines 29-37 column 4). It would have been obvious to apply the teachings of Onosaka to the system of Krishnan because this external modem and its driver could be a DSL modem with a DSL connectivity component since such teaching is conventional and well known in the art.

As to claim 13, Krishnan as modified further teaches the connectivity component (applets, line 24 column 3) includes a cable connectivity component (the applets upgrade the modem control software, lines 34-41 column 5) to enable connectivity (to connect a user computer to a remote computer, lines 34-35 column 1) to the host system (host computer 12, line 45 column 2) using a cable modem (cable modem, line 42 column 6).

As to claim 14, Krishnan as modified does not explicitly teach the use of satellite connectivity component with a satellite modem. Onosaka teaches the use of external modem and its driver (lines 29-37 column 4). It would have been obvious to apply the teachings of Onosaka to the system of Krishnan because this external modem and its driver could be a satellite modem with a satellite connectivity component since such teaching is conventional and well known in the art.

As to claim 15, Krishnan as modified further teaches the detection module is structured and arranged to detect whether the installation (determines if the applet on the remote modem has the newer version, lines 29-36 column 4) of the connectivity component (applets, line 24 column 3) is needed to enable connectivity (to connect a user computer to a remote computer, lines 34-35 column 1) between the client device (device capable of performing user input and output functions, lines 40-43 column 2) and the host system (host computer 12, line 45 column 2) in response to an input received from a user (send a message to the remote modem inquiring if the remote modem is Java enabled, lines 3-4 column 4) of the client device (device capable of performing user input and output functions, lines 40-43 column 2) requesting communications (to connect a user computer to a remote computer, lines 34-35 column 1) using the selected hardware device (modem 24, Fig. 1); and the installation module is structured and arranged to install (download the newer applet from the remote modem, lines 35-36 column 4) the connectivity component (applets, line 24 column 3) when the connectivity component (applets, line 24 column 3) is needed (if the remote modem has the newer version, lines 33-34 column 4) based on the input (send a message to the remote modem inquiring if the remote modem is Java enabled, lines 3-4 column 4) from the user of the client device (device capable of performing user input and output functions, lines 40-43 column 2).

As to claim 16, Krishnan as modified does not explicitly teach a request to change connectivity to the host system from a low-bandwidth connection type to a broadband connection type. Onosaka teaches request to change connectivity (user

selects the communication devices, lines 27-28 column 2). Onosaka does not explicitly teach changing from a low-bandwidth to a broadband connection type. However, Onosaka teaches the system is using several types of modems and drivers (lines 29-37 column 4). Therefore one of ordinary skill in the art would conclude that these modems could include a low-bandwidth type and a broadband type since such teachings are conventional and well known in the art.

As to claim 19, Onosaka further teaches hardware device detector (detect the device being connected, lines 30-31 column 2).

As to claim 20, Onosaka further teaches searching on the client device for the connectivity component (select the current modem driver based on the selecting modem, lines 29-34 column 4).

As to claim 21, Krishnan as modified further teaches the detection module is structured and arranged to detect (determines if the applet on the remote modem has the newer version, lines 29-36 column 4) the presence of the connectivity component (applets may be discarded after use, lines 5-6 column 5) at the client device (device capable of performing user input and output functions, lines 40-43 column 2), and the receiving module (data port 16, line 44 column 2) is structured and arranged to receive (exchange data between modem 10 and host computer 12, lines 44-45 column 2) the connectivity component (applets, line 24 column 3) from a remote server (host computer 12, line 45 column 2) for installation (download the newer applet from the remote modem, lines 35-36 column 4) on the client device when the detection module does not detect (applets may be discarded after use, lines 5-6 column 5) the connectivity

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component on the client device (device capable of performing user input and output functions, lines 40-43 column 2).

As to claim 22, Krishnan as modified further teaches the receiving module (data port 16, line 44 column 2) is structured and arranged to copy at least one of the connectivity components (applets, line 24 column 3) to the client device (device capable of performing user input and output functions, lines 40-43 column 2) from a disk (ROM 22, lines 56-57 column 2) and store the connectivity component in a dormant state (applets downloaded into modem 10 and stored in RAM 20, lines 24-35 column 3) on the client device (device capable of performing user input and output functions, lines 40-43 column 2).

As to claim 23, Onosaka further teaches the modules perform automatically without user intervention (automatically detects, line 31 column 2).

As to claim 24, Krishnan as modified further teaches the connectivity component received (applets downloaded into modem 10 and stored in RAM 20, lines 24-35 column 3) includes an updated version of a connectivity component stored (the newer version of the applet is cached and retained, lines 3-5 column 5) on the client device (device capable of performing user input and output functions, lines 40-43 column 2) before the connectivity component (applets, line 24 column 3) is installed by the installation module (download the newer applet from the remote modem, lines 35-36 column 4).

As to claim 25, Krishnan as modified further teaches comparing a version of the updated connectivity component (applets, line 24 column 3) received with a version of

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the connectivity component (determines if the applet on the remote modem has the newer version, lines 29-36 column 4) stored on the client device (device capable of performing user input and output functions, lines 40-43 column 2).

As to claim 26, Krishnan as modified further teaches the receiving module is structured and arranged to receive version information (if the remote modem has a newer version, lines 33-34 column 4) from a remote server associated with a connectivity component; comparing a version of the updated connectivity component (applets, line 24 column 3) received with a version of the connectivity component (determines if the applet on the remote modem has the newer version, lines 29-36 column 4) stored on the client device (device capable of performing user input and output functions, lines 40-43 column 2); install the connectivity component (download the newer applet from the remote modem, lines 35-36 column 4).

As to claim 27, Krishnan as modified further teaches the receiving module is structured and arranged to receive (download the newer applet from the remote modem, lines 35-36 column 4) an updated connectivity component (applets, line 24 column 3) from the remote server (host computer 12, line 45 column 2) when the detection module determines that the version information associated with the connectivity component stored on the client device (device capable of performing user input and output functions, lines 40-43 column 2) is not correct when compared against the version information received from the remote server (determines if the applet on the remote modem has the newer version, lines 29-36 column 4).

As to claim 28, Onosaka further teaches detecting a new hardware device (detect the device being connected, lines 30-31 column 2).

As to claim 29, Krishnan as modified further teaches the receiving module is structured and arranged to receive (download the newer applet from the remote modem, lines 35-36 column 4) an updated connectivity component (applets, line 24 column 3) from a remote server (host computer 12, line 45 column 2) when the detection module does not detect the connectivity component that is needed (the applet on the remote modem has the newer version, lines 29-36 column 4) to enable the connectivity.

As to claim 30, Krishnan as modified further teaches a host system receiving module receive a request (a message to the remote modem, line 3 column 4) to send a connectivity component (applets, line 24 column 3) to a local client device; a host system installation module send the connectivity component to the local client device (download the newer applet from the remote modem, lines 35-36 column 4) for installation on the local client device in response to the request.

As to claim 31, Krishnan as modified further teaches a host system detection module that is structured and arranged to determine a version (the applet on the remote modem has the newer version, lines 29-36 column 4) of the connectivity component needed for installation (download the newer applet from the remote modem, lines 35-36 column 4) on the local client device.

As to claims 32-42, note the discussions of claims 1-11 above, respectively.

As to claims 43-44, note the discussions of claims 15-16 above, respectively.

As to claims 47-59, note the discussions of claims 19-31 above, respectively.

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As to claims 60-70, note the discussions of claims 1-11 above, respectively.

As to claims 71-72, note the discussions of claims 15-16 above, respectively.

As to claims 75-87, note the discussions of claims 19-31 above, respectively.

4. Claims 17-18, 45-46 and 73-74 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krishnan in view of Onosaka, and further in view of Coutts U.S Patent No. 6,311,165.

As to claim 17, Krishnan as modified does not explicitly teach the installation module installs a list of programs needed to install the connectivity component. Coutts teaches a list of programs needed to install the driver (software modules, line 25 column 21). It would have been obvious to apply the teachings of Coutts to the system of Krishnan as modified because this reduces the client's memory space and increasing processing time as disclosed by Coutts (lines 10-54 column 3).

As to claim 18, Coutts further teaches sequential list of programs such that only one reboot of the client device is necessary to accomplish installation (simple boot code...downloading the current version of the application software, lines 41-52 column 9).

As to claims 45-46, note the discussions of claims 17-18 above, respectively.

As to claims 73-74, note the discussions of claims 17-18 above, respectively.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to The Thanh Ho whose telephone number is 703-306-

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5540. A voice mail service is also available for this number. The examiner can normally be reached on Monday – Friday, 8:30 am – 5:00 pm.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Any response to this action should be mailed to:

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- NON OFFICAL faxes should not be signed, please send to (703) 746 – 7240

TTH
January 9, 2004



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